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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,849	04/30/2001	Kathleen M. Moriarty	64860/RSM/KJB	2748

7590 09/08/2004

Cooper & Dunham LLP  
1185 Avenue of the Americas  
New York, NY 10036

EXAMINER

PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/844,849

Applicant(s)

MORIARTY, KATHLEEN M.

Examiner

Hassan Phillips

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/17/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The Information Disclosure Statements (IDS) filed on December 17, 2002, and July 27, 2001, have been received and considered by the examiner.

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "56" has been used to designate both "Transmitter" and "Storage". Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are further objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: reference character 52, mentioned in line 6 on page 21. Corrected drawing sheets are required in reply to the Office action to avoid

abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

1. The disclosure is objected to because of the following informalities:

There is a minor error in the 5<sup>th</sup> line of the first paragraph under the Detailed Description of the Invention. The "recipient" should be referenced with the numeral 2, instead of 3.

Also, "processor" is referenced with the incorrect reference numeral in the second to last paragraph on page 21. The correct reference numeral should be 54.

Appropriate correction is required.

#### ***Claim Objections***

1. Claim 13 is objected to because of the following informalities: There is a minor error in the third line of claim 13. In the third line of claim 13, the word "an", in between "generating", and "a" should be removed. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 5, 10-12, are rejected under 35 U.S.C. 102(e) as being anticipated by Lamberton et al. (hereinafter Lamberton), U.S. Patent Pub. No. 2001/0042200.

3. In considering claims 1 and 5, Lamberton teaches a method of gathering information about a connection between a sender and a recipient in a network comprising the steps of:

- a) Generating an information query by the sender, sending the information query to the recipient (730), receiving the information query at a border device (720) of the recipient, processing the information query at the border device according to a plurality of predetermined rules, wherein the predetermined rules provide for one of: providing selected information requested by the information query in a response to be sent to the sender; discarding the information query; and passing the information query

through the border device to the recipient for response, (page 2, paragraph 8, also see Fig. 7).

4. In considering claims 2 and 11, Lamberton teaches the selected information provided to the sender including identification information (310) that is different than that of the border device. See page 2, paragraph 8, and Fig. 3.

5. In considering claim 10, Lamberton teaches a border device (720) positioned between a sender and a recipient for use in gathering information regarding a connection between the sender and the recipient in a network, the border device comprising:

- a) A receiver for receiving an information query from the sender addressed to the recipient, a processor for processing the information query on behalf of the recipient to generate a response to the information query including selected information, and a transmitter for sending the response including the selected information to the sender, (page 2, paragraph 8, also see Fig. 7).

6. In considering claim 12, Lamberton teaches the border device responding to information queries for a plurality of recipients. See page 5, paragraph 37.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 4, 8, 9, 19, 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of Vange et al. (hereinafter Vange), U.S. Patent Pub. No. 2002/0002686.

3. In considering claims 3 and 8, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The sender having a cache for storing at least a portion of the selected information.

Nevertheless, caches were well known in the art at the time of the present invention. In a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Using a cache to store IP address mapping information at client (117),  
(page 5, paragraph 54).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least a portion of the selected information sent from the border device to the sender at the sender



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when a destination address of the information query corresponds to a predetermined group of addresses stored at the sender, and utilizing the stored selected information from the response whenever an information query is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the network by reducing the steps normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.

4. In considering claims 4 and 9, it is implicit in the teachings of Vange that the stored selected information in the cache will be deleted after a predetermined period of time. See page 5, paragraph 54. One of ordinary skill in the art would combine the teachings of Lamberton with Vange, for the reasons indicated in consideration of claims 3 and 8.

5. In considering claim 19, Lamberton teaches a method of gathering information about a connection between a sender and a recipient in a network comprising the steps of:

- a) Generating an information query by the sender, sending the information query to the recipient (730), receiving the information query at a border device (720) of the recipient, processing the information query at the border device according to a plurality of predetermined rules, wherein the predetermined rules provide for one of: providing selected information

requested by the information query in a response to be sent to the sender; discarding the information query; and passing the information query through the border device to the recipient for response, (page 2, paragraph 8, also see Fig. 7).

Although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The sender having a cache for storing at least a portion of the selected information.

Nevertheless, caches were well known in the art at the time of the present invention. In a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Using a cache to store IP address mapping information at client (117), (page 5, paragraph 54).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least a portion of the selected information sent from the border device to the sender, at the sender, for a predetermined period of time when a destination address of the information query corresponds to a predetermined group of addresses stored at the sender, and utilizing the stored selected information from the response whenever an information query is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the

network by reducing the steps normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.

6. In considering claim 20, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The predetermined addresses being Classless Inter-Domain Routing (CIDR) addresses.

Nevertheless, having the predetermined addresses belong to a group of CIDR addresses is a field of use limitation and not patentable distinction. Also CIDR addressing was well known in the art at the time of the present invention. Furthermore, in a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Resolving requested domain names in a conventional manner, (page 5, paragraph 55).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the plurality of predetermined addresses belonging to a group of CIDR addresses. This would have provided a well-known method for using Internet address space more efficiently by allowing the assignment of IP addresses in multiple contiguous blocks.

7. Claims 6, 13-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of Applicants Admitted Prior Art (AAPA).

8. In considering claims 6 and 15, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) Discarding the information query, when the query is too large.

Nevertheless, the discarding of an information query when the query is too large is a field of use limitation and not patentable distinction. Furthermore, the applicant admits that it was well known in the art to discard information queries for various reasons. See page 7, lines 1-5.

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show one of the plurality of predetermined rules providing for discarding the information query when the information query is of a size larger than a predetermined range of allowable sizes. This would have provided a well-known means for discarding information queries that appear to be malicious, thereby, providing an efficient means for detecting attackers and blocking communication between the attacker and a receiver.

9. In considering claim 13, Lamberton teaches a method of gathering information regarding a connection between a sender and a recipient in a network comprising the steps of:

- a) Generating a packet by the sender, sending the packet to the recipient (730), receiving the packet at a border device (720) of the recipient, and processing the packet at the border device according to a plurality of

predetermined rules, wherein the predetermined rules provide for one of:  
generating a response packet to be sent to the sender; discarding the  
packet; and passing the packet through the border device to the recipient  
for response, (page 2, paragraph 8, also see Fig. 7).

Although the disclosed method of Lamberton shows substantial features of the  
claimed invention, it fails to expressly disclose:

- a) The packet being a performance measurement packet.

Nevertheless, performance measurement packets were well known in the art at  
the time of the present invention. The applicant admits this in the first two paragraphs  
under the section titled **Description of Related Art**. See AAPA pages 1 and 2.

Thus, it would have been obvious to one of ordinary skill in the art to modify the  
teachings of Lamberton to show the packet being a performance measurement packet.  
This would have enhanced the teachings of Lamberton to provide a useful tool for  
testing the performance between two or more hosts on the Internet, such as in cases  
where the closest server is determined to be used in a load balancing system, AAPA  
page 2, paragraph 2.

10. In considering claim 14, Lamberton teaches the predetermined rules  
generating a response packet, the response including identification information (310)  
that is different than that of the border device. See page 2, paragraph 8, and Fig. 3.

11. Claim 7, is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of Templin et al. (hereinafter Templin), U.S. Patent 5,781,550 (supplied by applicant).

12. In considering claims 7, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The information query including predetermined identification information.

Nevertheless, information queries including predetermined identification information were well known in the art at the time of the present invention. In a similar field of endeavor, Templin teaches this in his discussion of the prior art. More specifically, Templin teaches:

- a) Passing an information query through a border unit when the information query includes predetermined information, (col. 2, lines 22-29).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show one rule of the plurality of predetermined rules providing for passing the information query through the border unit to the recipient for response when the information query includes predetermined identification information. This would have facilitated communication between the sender and a recipient in the network by instantly passing the information query through the border unit when the information query includes predetermined identification information, thereby, reducing the steps normally required for the sender to access the recipient in the network.

13. Claim 16, is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of AAPA, and further in view of Templin.

14. In considering claim 16, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The information query including predetermined identification information.

Nevertheless, information queries including predetermined identification information were well known in the art at the time of the present invention. In a similar field of endeavor, Templin teaches this in his discussion of the prior art. More specifically, Templin teaches:

- a) Passing an information query through a border unit when the information query includes predetermined information, (col. 2, lines 22-29).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show one rule of the plurality of predetermined rules providing for passing the information query through the border unit to the recipient for response when the information query includes predetermined identification information. This would have facilitated communication between the sender and a recipient in the network by instantly passing the information query through the border unit when the information query includes predetermined identification information, thereby, reducing the steps normally required for the sender to access the recipient in the network.

15. Claims 17, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamberton in view of AAPA, and further in view of Vange.

16. In considering claim 17, although the disclosed method of Lamberton shows substantial features of the claimed invention, it fails to expressly disclose:

- a) The sender having a cache for storing at least a portion of the selected information.

Nevertheless, caches were well known in the art at the time of the present invention. In a similar field of endeavor, Vange teaches a method for overcoming denial of service attacks that includes:

- a) Using a cache to store IP address mapping information at client (117),  
(page 5, paragraph 54).

Thus it would have been obvious to one of ordinary skill in the art to modify the teachings of Lamberton to show the sender having a cache for storing at least the performance metric information sent from the border device to the sender at the sender when a destination address of performance measurement packet corresponds to one of a plurality of predetermined addresses stored at the sender, and utilizing the stored performance metric information from the response whenever performance measurement packet is generated including any of the predetermined group of addresses stored at the sender. This would have facilitated communication between the sender and a recipient in the network by reducing the steps normally required for the sender to access the recipient in the network, Vange, page 5, paragraph 54.



17. In considering claim 18, it is implicit in the teachings of Vange that the stored performance measurement information in the cache will be deleted after a predetermined period of time. See page 5, paragraph 54. One of ordinary skill in the art would combine the teachings of Lamberton with Vange, for the reasons indicated in consideration of claim 17.

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lamberton et al., U.S. Patent Pub. 2001/0042200, discloses a method and apparatus for intercepting packets for improved security and intrusion detection.

Vange et al., U.S. Patent Pub. 2002/0002686, discloses a method for overcoming denial of service attacks.

Templin et al. U.S. Patent 5,781,550 (supplied by applicant), discloses a transparent and secure network gateway.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (703) 308-6687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**ZARNI MAUNG**  
**PRIMARY EXAMINER**